

Exploring Reflections

Coordinates for vertices of the flag:

A(0,9), B(-5,9), C(-5, 7), D(-1,5), E(-1,1), F(0,1), G(0,9)

1. Use the 1st grid on the attached grid sheet to plot and label the given points. Connect the points to create the original flag.
2. Fill in the x and y lists with the given coordinates.
3. Graph the reflection of the original flag across the y -axis. Label the points.
4. Fill in the x and y lists with the coordinates of the reflection.
 - a. Which values changed?
 - b. How did they change?
5. Before graphing the reflection of the original flag across the x -axis, predict how the coordinates will change. Fill in the x and y lists with the coordinates you predicted.
6. Now graph the reflection of the original flag across the x -axis. Label the points.
 - a. Which values changed?
 - b. How did they change?
 - c. Did this change match your prediction?

Original:

Flip over y-axis:

Prediction for flip over x-axis:

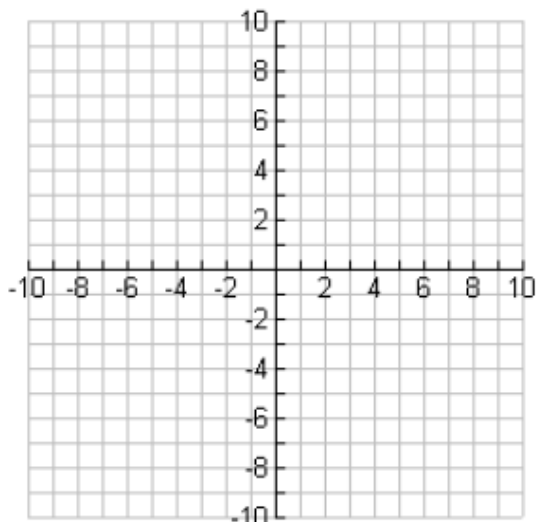
Actual values for flip over x-axis:

X	Y

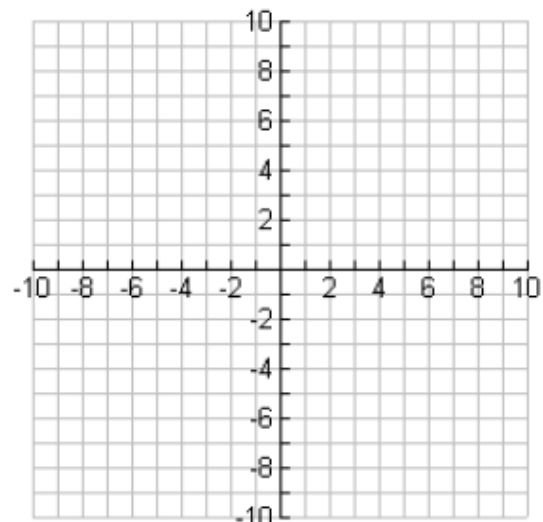
X	Y

X	Y

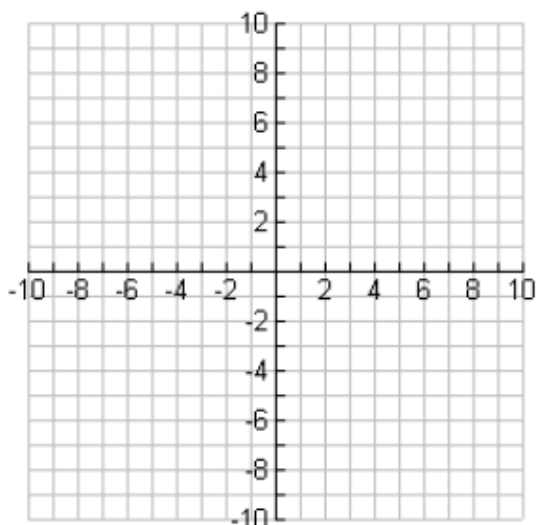
X	Y



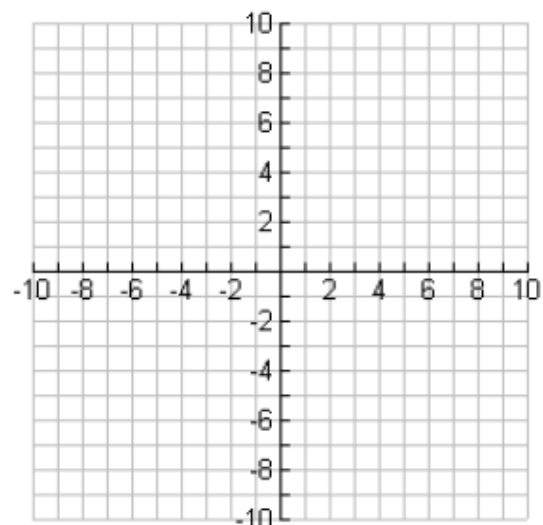
Original ↑



Flip over y-axis ↑



Predicted values for flip over x-axis ↑



Actual values for flip over x-axis ↑